Kudos Pro

Quickstart guide

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Introduction

KudosPro is a range of 1U converters and signal processing products for all budgets and applications. Applications include format and frame rate conversion from SD up to 3Gbps (1080p) including film rate processing. There are up to 4 channels of conversion within a 1U box, all with a highly attractive design and user interface. There is an easy to use front panel, and remote control via Snell's RollCall control and monitoring software, which is downloadable free from the Snell web site. KudosPro is customizable with optional composite video support, optional Dolby®E decoding and transcoding, and optional fiber I/O.

In this Quickstart Guide, we'll cover the most important steps to get you started on a simple SDI conversion. For more detailed conversions and signal processing applications, please see the user manual which accompanies the product.

KudosPro range

MC500, MC1000 and MC2000 : 1U motion compensated frame rate and format converters

- Applications : Affordable international program exchange ; Monetizing program assets via global markets
- Benefits : Superb standards conversion capabilities enable program makers and content owners to offer high quality material to world-wide customers, whilst keeping down project costs.
- Conversions available : from any SD, HD, 3Gbps broadcast standard and frame rate to any other SD, HD, 3Gbps broadcast standard and frame rate. MC1000 and MC2000 include 1080 and 720 23/24/25/29 p and 1080 23/24/25/29 psf formats

LC2000 and LC4000 : 1U motion adaptive linear frame rate and format converters

- Applications : High density conversion ; Efficiently meeting your conversion needs;
- Benefits : high density (up to 4 channels in one box); Simple operation; Auto input sensing : conversion set-up simply "Set and forget"
- Conversions available : from any SD, HD, 3Gbps standard and frame rate to any other SD, HD, 3Gbps standard and frame rate including 1080 and 720 23/24/25/29 p and 1080 23/24/25/29 psf formats

SV2000 and SV4000 : 1U motion adaptive format converters

- Applications : Maximising the value of content : upconversion of SD content for new HD services; downconversion of HD produced material for legacy SD services
- Benefits : high density, extensive audio I/O and processing tools; fiber and composite I/O options available; closed caption, timecode, AFD, legalizer, noise reduction, synchronization, intuitive and attractive front panel with monitoring output
- Conversions available : from any SD, HD, 3Gbps format to any other SD, HD, 3Gbps format at the same frame rate including 1080 and 720 23/24/25/29 p and 1080 23/24/25/29 psf formats

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Getting started with KudosPro - connections and control

Remove packaging and connect power to your KudosPro unit. Power and signal connections are shown in Figure 1.

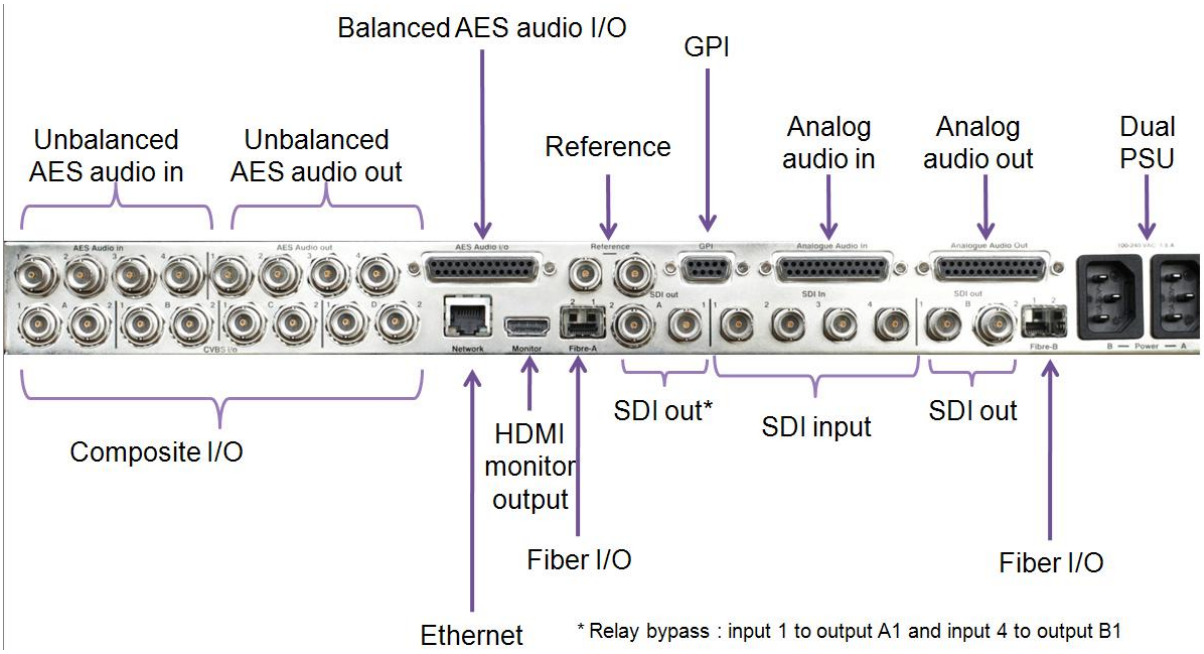

Figure 1 : KudosPro rear panel showing connections

KudosPro front panel controls are illustrated in Figure 2.

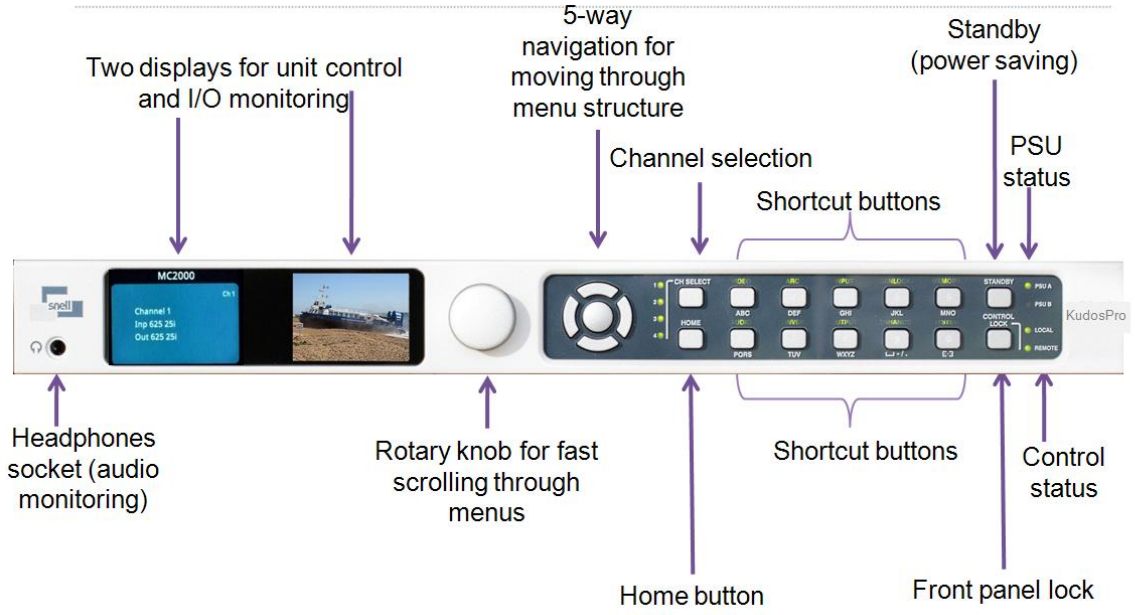

Figure 2 : KudosPro front panel controls

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An example one channel SDI conversion

Connect the source (e.g. VTR) to SDI input 1 and a monitor to SDI output A1. You can use the HDMI monitor output also.

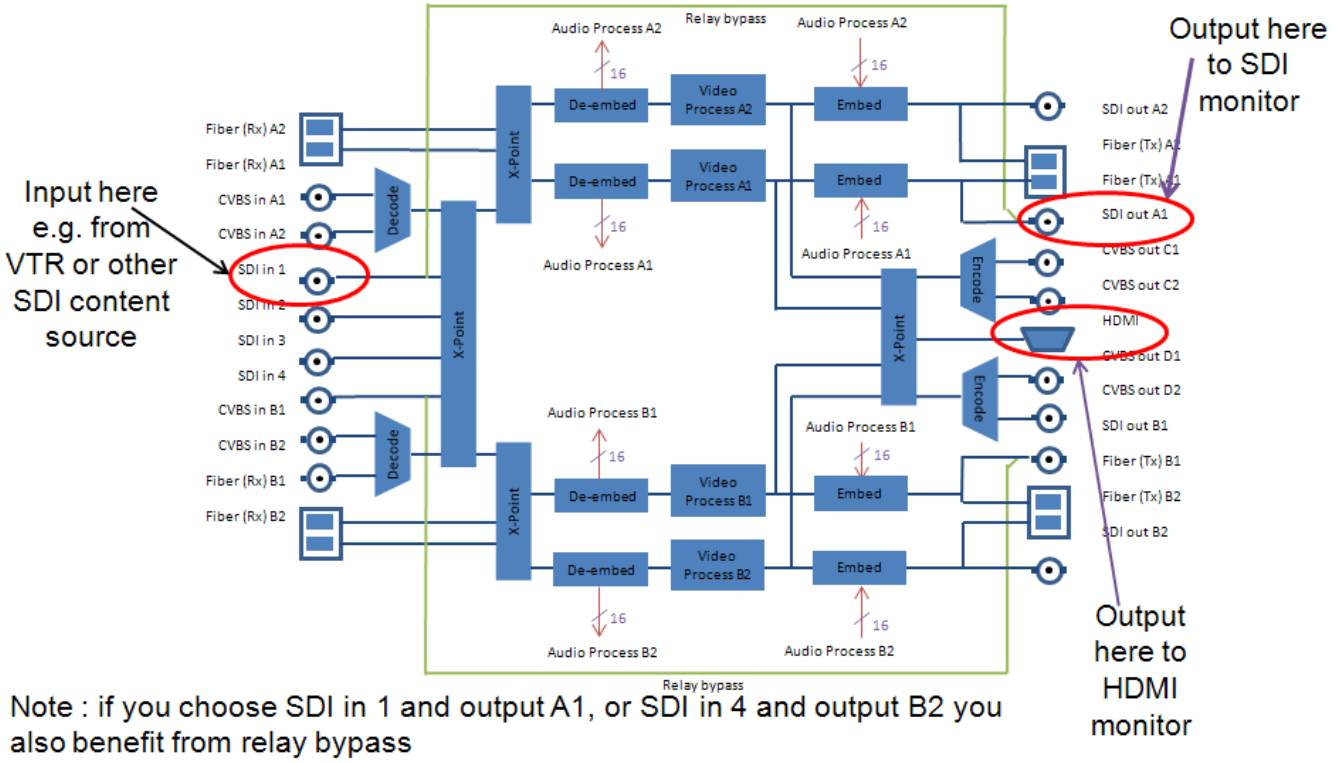

Figure 3a : single conversion channel example (block diagram)

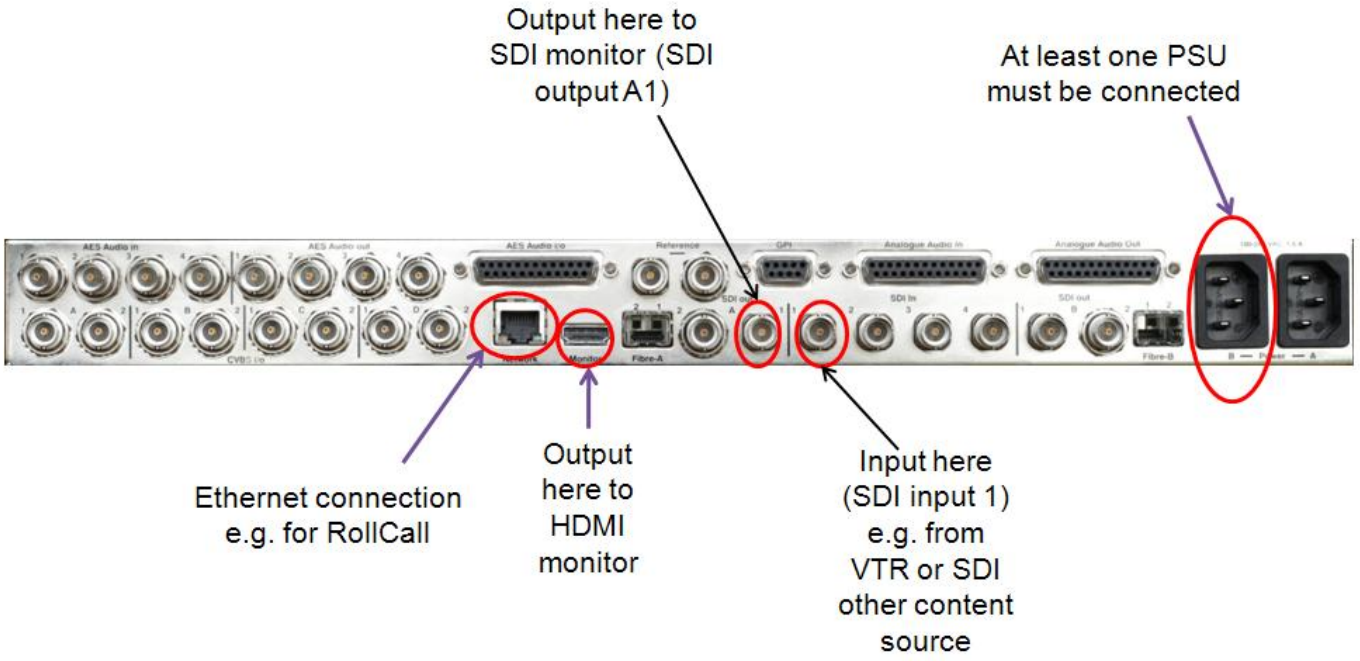
Output here to SDI monitor (SDI output A1)
At least one PSU must be connected
Ethernet connection e.g. for RollCall
Output here to HDMI monitor
Input here (SDI input 1) e.g. from VTR or SDI other content source

Figure 3b : single conversion channel example (rear panel)

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Step-by-step conversion guide

Step 1 : Press center select button to activate first menu.

Step 2 : Note the monitoring output on the right hand display and the channel status on the left-hand display

Step 3 : Press channel select button until channel 1 is highlighted.

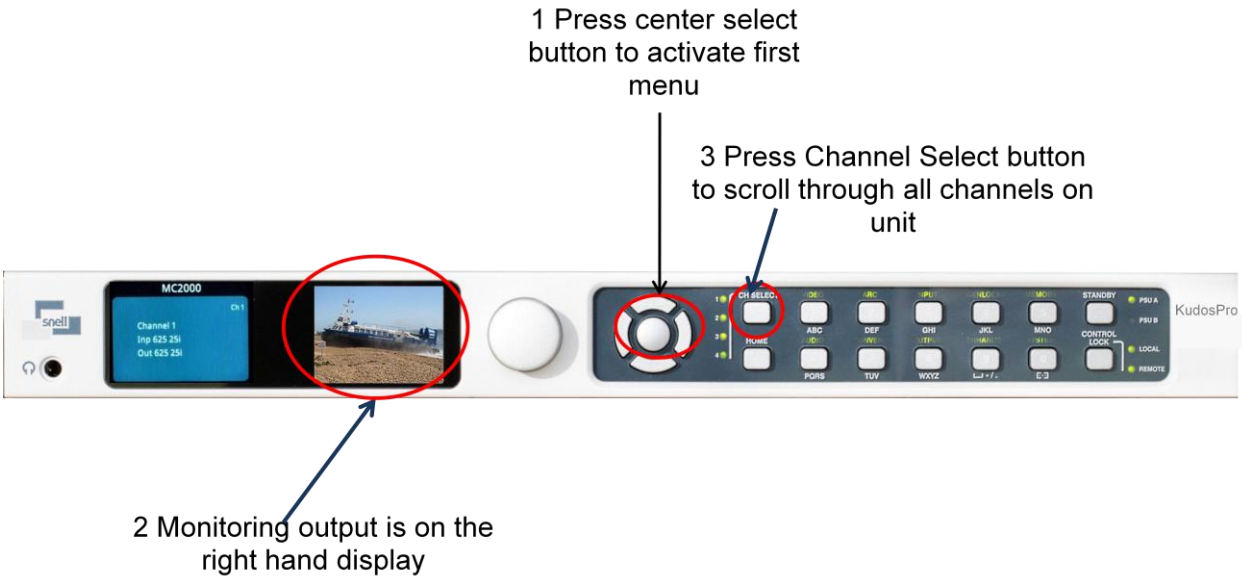
1 Press center select button to activate first menu
3 Press Channel Select button to scroll through all channels on unit
MC2000
KudosPro
2 Monitoring output is on the right hand display

Figure 4 : selecting the conversion channel

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Step 4 : Press Select again to move from status screen to the first menus (Figure 5).

Step 5 : Use the 5-way navigation keys to move through the menus until you reach the Input menu, then press the center button

Step 6 : Note that you can also reach the Input menu via the shortcut button

Step 7 : Select SDI 1 from the Input list, then press the select button again to confirm "done"

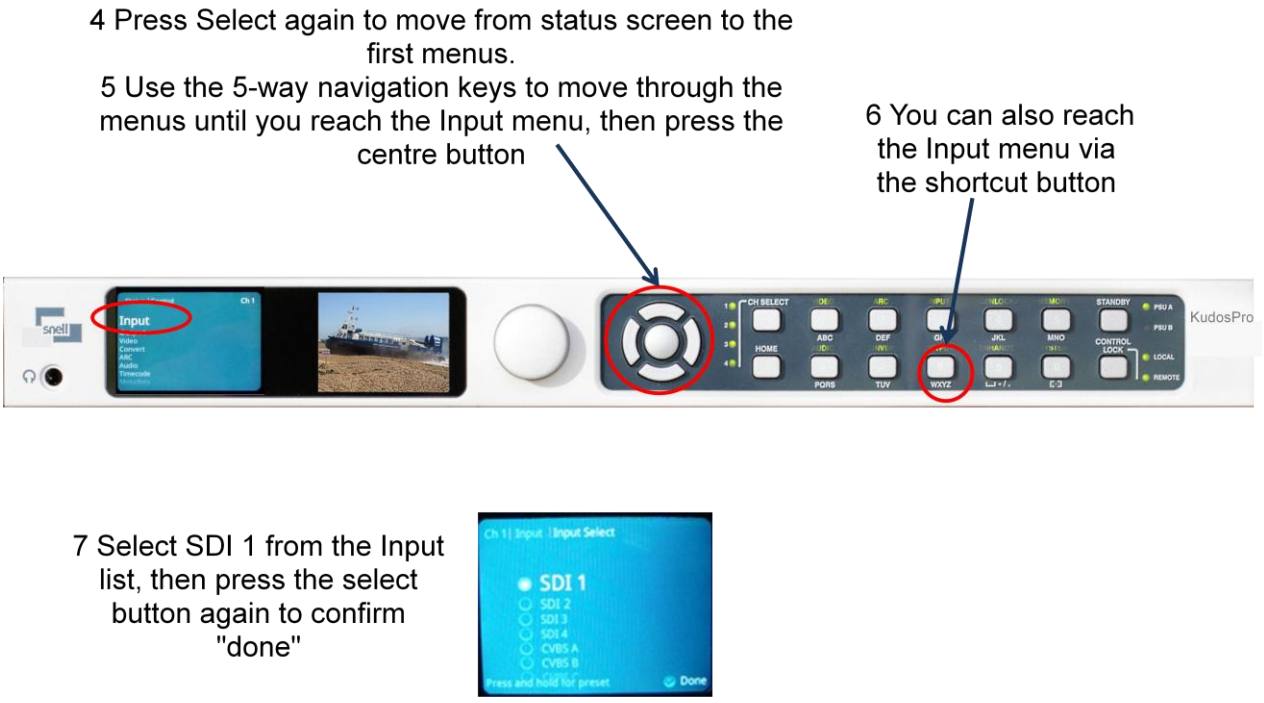
4 Press Select again to move from status screen to the first menus.
5 Use the 5-way navigation keys to move through the menus until you reach the Input menu, then press the centre button
6 You can also reach the Input menu via the shortcut button
Input
KudosPro
7 Select SDI 1 from the Input list, then press the select button again to confirm "done"
Input Select
SDI 1
SDI 2
SDI 3
SDI 4
CVBS A
CVBS B
Done

Figure 5 : setting up input routing

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Step 8 : Use the 5-way navigation keys to move through the menus until you reach the Output menu, then press the centre button

Step 9 : Note that you can see the active menu items become larger as you move up and down the list

Step 10 : You can also scroll through the menus using the rotary control. Press the control to select an item

Step 11 : Note that you can also reach the Output menu via the shortcut button

Step 12 : Select the chosen output standard from the list, then press the select button again to confirm "done"

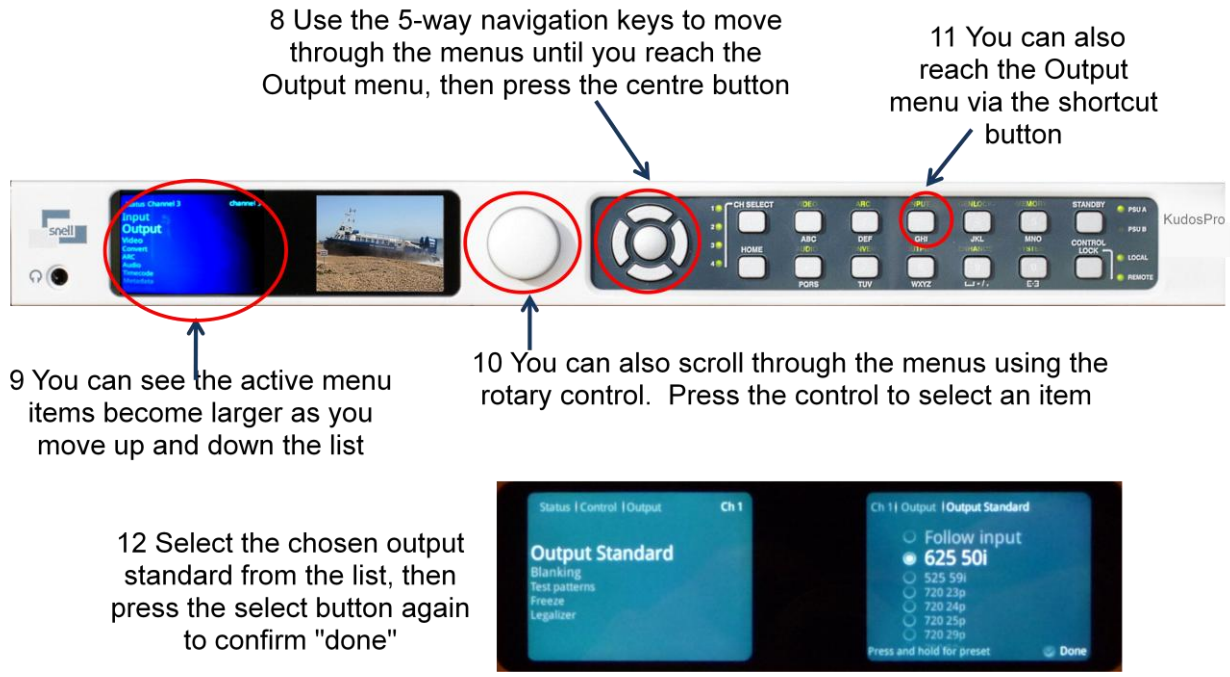
8 Use the 5-way navigation keys to move through the menus until you reach the Output menu, then press the centre button
11 You can also reach the Output menu via the shortcut button
9 You can see the active menu items become larger as you move up and down the list
10 You can also scroll through the menus using the rotary control. Press the control to select an item
12 Select the chosen output standard from the list, then press the select button again to confirm "done"
Status | Control | Output
Ch 1
Output Standard
Blanking
Test patterns
Freeze
Legalizer
Ch 1 | Output | Output Standard
Follow input
625 50i
525 59i
720 23p
720 24p
720 25p
720 29p
Press and hold for preset
Done

Figure 6 : selecting the required conversion

Your KudosPro unit is now converting content sourced through SDI input 1 with output on SDI out A1.

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Updating a KudosPro unit

KudosPro products are software updatable.

1 On your PC, direct your browser to http://www.snellgroup.com/support/software-updates/category/3/conversion-and-restoration

2 Click on the link "Download upgrade".

3 Download the latest version onto your PC - you'll find this is a file called kudospro_upgrader_vx_xx_x.exe

4 Connect your KudosPro unit to your IT network via the Ethernet connection (see Figure 1).

5 Press the Home shortcut button. Make a note of the IP address shown on the KudosPro front panel top right of the front panel display.

6 Double-click kudospro_upgrader_vx_xx_x.exe and enter the IP address of your KudosPro unit.

7 The upgrader will now update your software. Please note that this procedure takes about 15 - 20 minutes and you **must not**

- remove the Ethernet connection
- power down the unit

during the upgrade.

8 When the upgrade is complete, the upgrader will power cycle the unit. This takes about 2 minutes.

9 Close the upgrader window on your PC.

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Troubleshooting hints

1 There's no output on my monitor

Make sure you have the correct standard SDI monitor connected to SDI out A1. Note that many monitors only support a limited number of video standards.

2 My right-hand display is blank

Check that you have valid SDI video on SDI input 1. Check on the home screen that the standard you are expecting is showing on the status display for channel 1. If the display shows "input loss" then please check that your video source is playing out correctly. Also check that the channel select LED for channel 1 is illuminated.

3 My MC500/MC1000/MC2000 output pictures are poor quality

For MC500/MC1000/MC2000, check that motion process is enabled (via shortcut button "convert" or menu item "convert"). In order to use motion compensation, motion process must be enabled.

4 I cannot convert from 59Hz to 50Hz.

Frame rate conversion is only available on MC500/MC1000/2000 and LC2000/4000. SV2000 and SV4000 products offer up/down/cross conversion at the same frame rate.

5 My output pictures look too sharp or too soft

If the results are not as you expect, please check that all processing options are enabled or disabled as appropriate e.g. enhancement should be disabled at the start of a conversion. It can be turned on selectively during a conversion as required. To enable or disable enhancement, use the Enhance shortcut button or select Nonlinear enhancer from the Video menu.

6 I think there's a problem with my unit

Please contact your authorised Snell channel partner or Snell Customer Support
http://www.snellgroup.com/support/customer-support/

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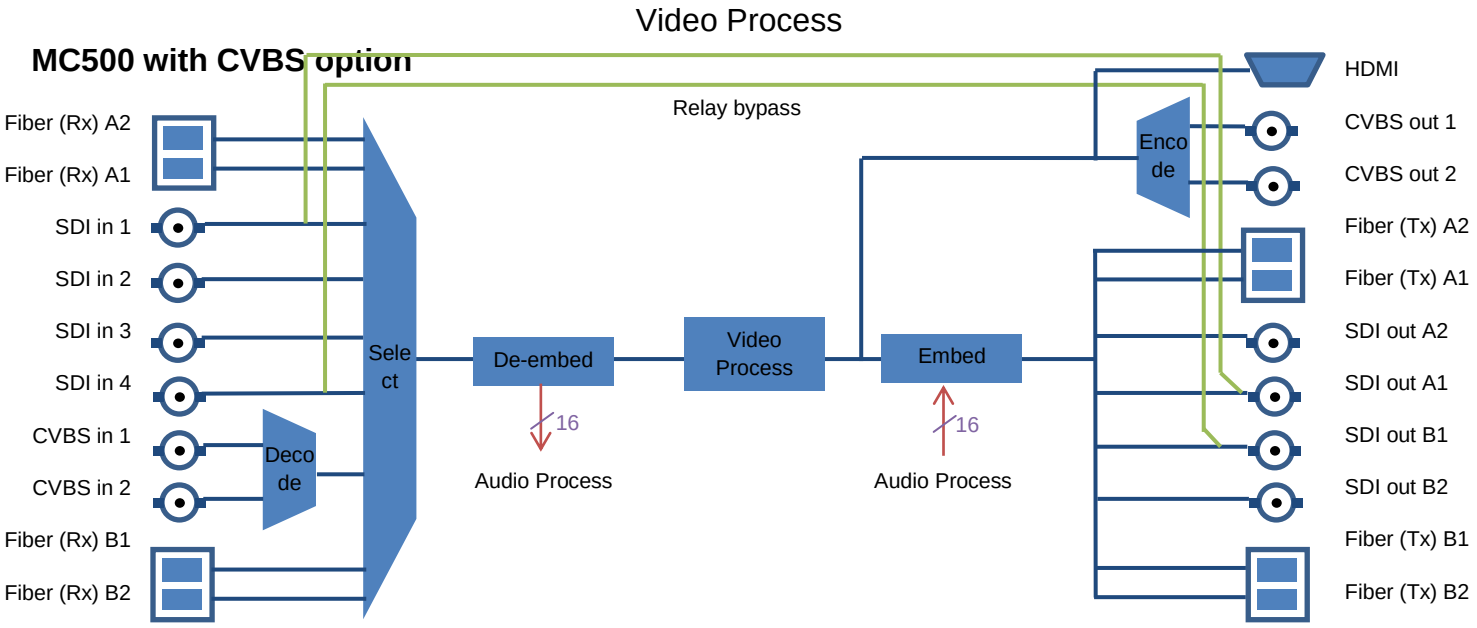
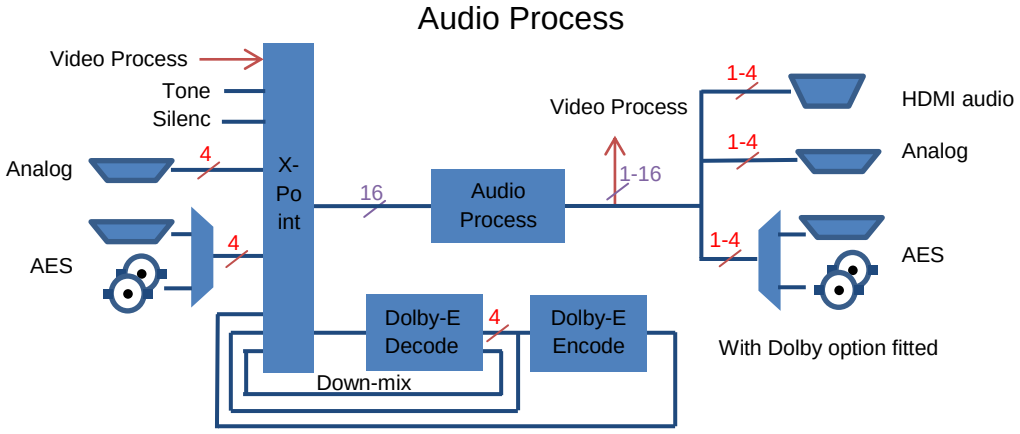
Appendix A : Block diagrams by model

MC500 with CVBS option





16 = Channels

4 = Pairs

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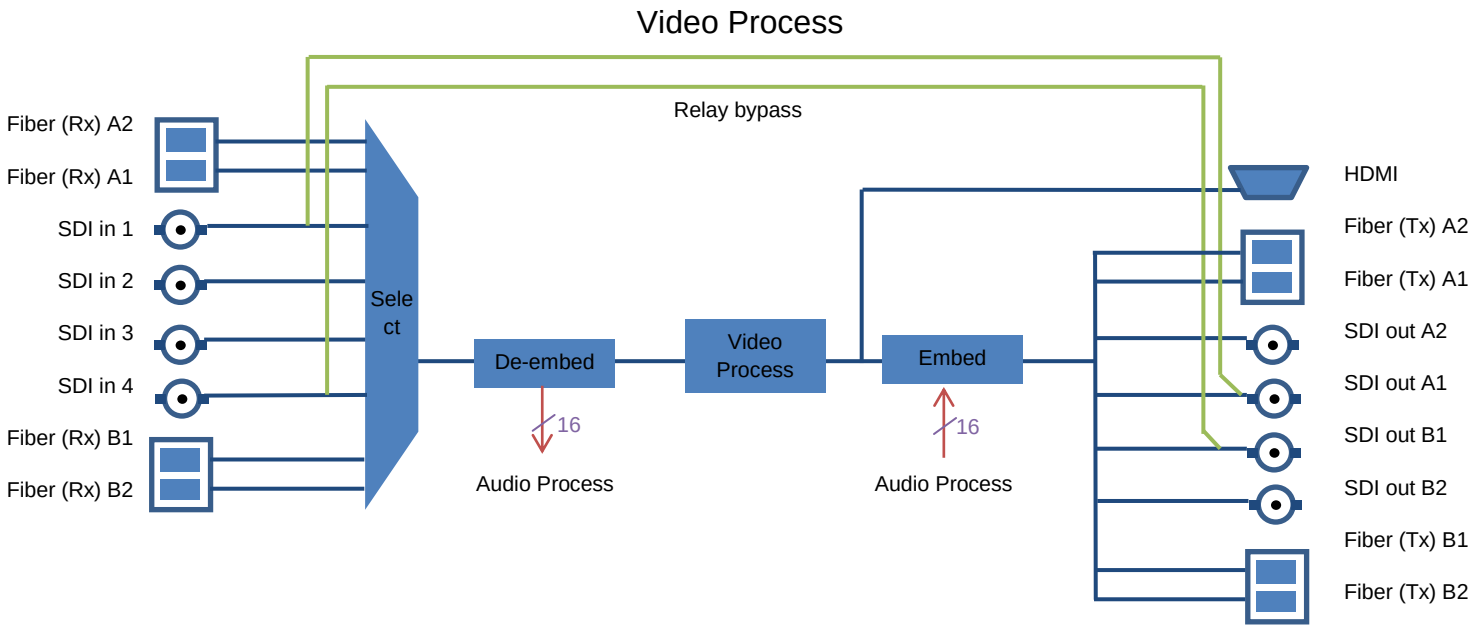
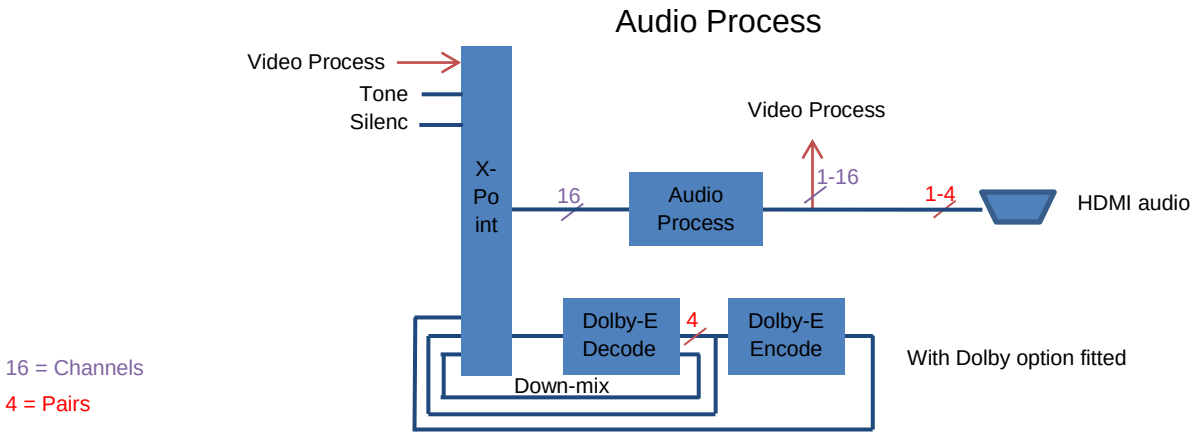
MC500 without CVBS option





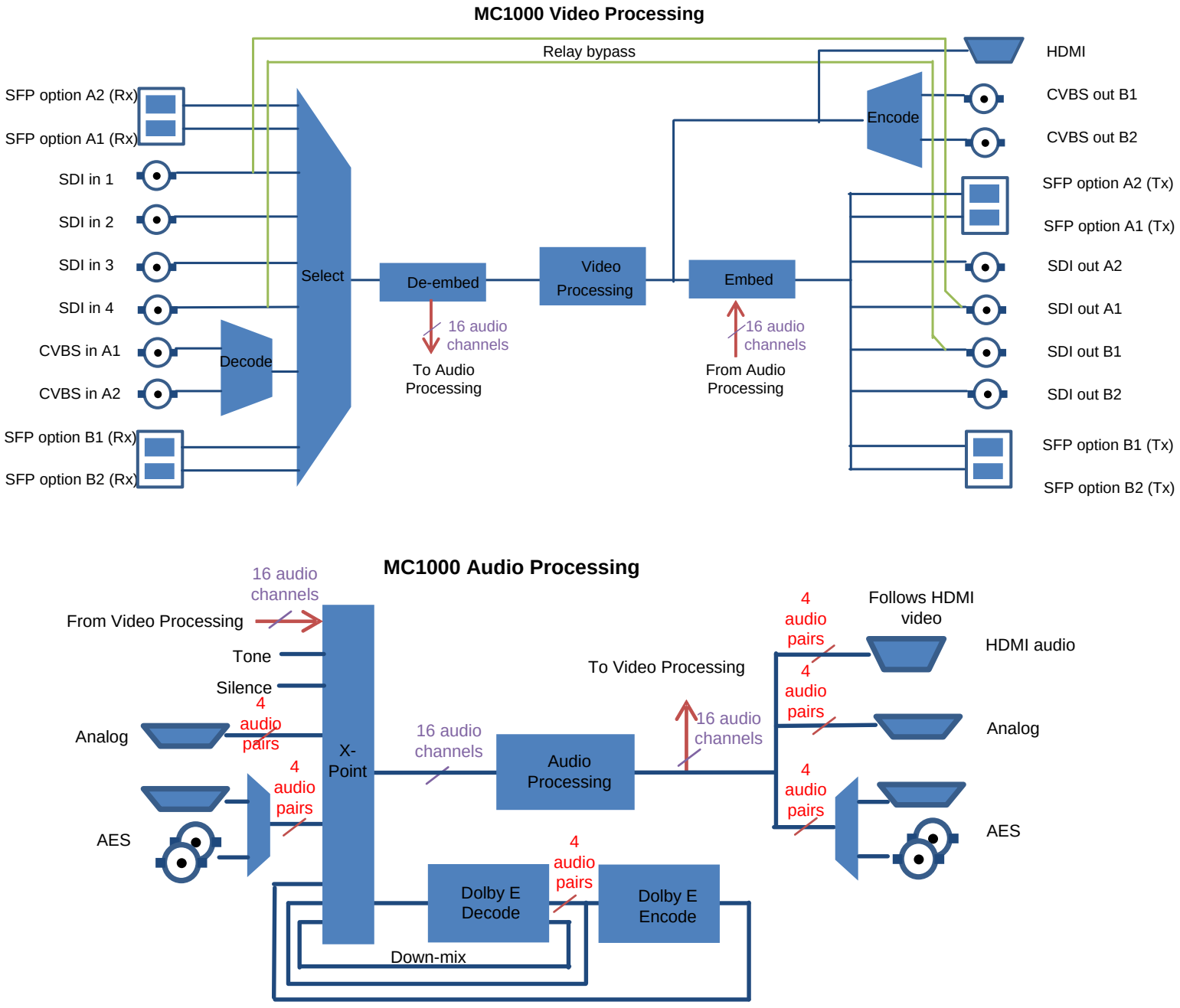


Figure 9: MC1000 block diagrams

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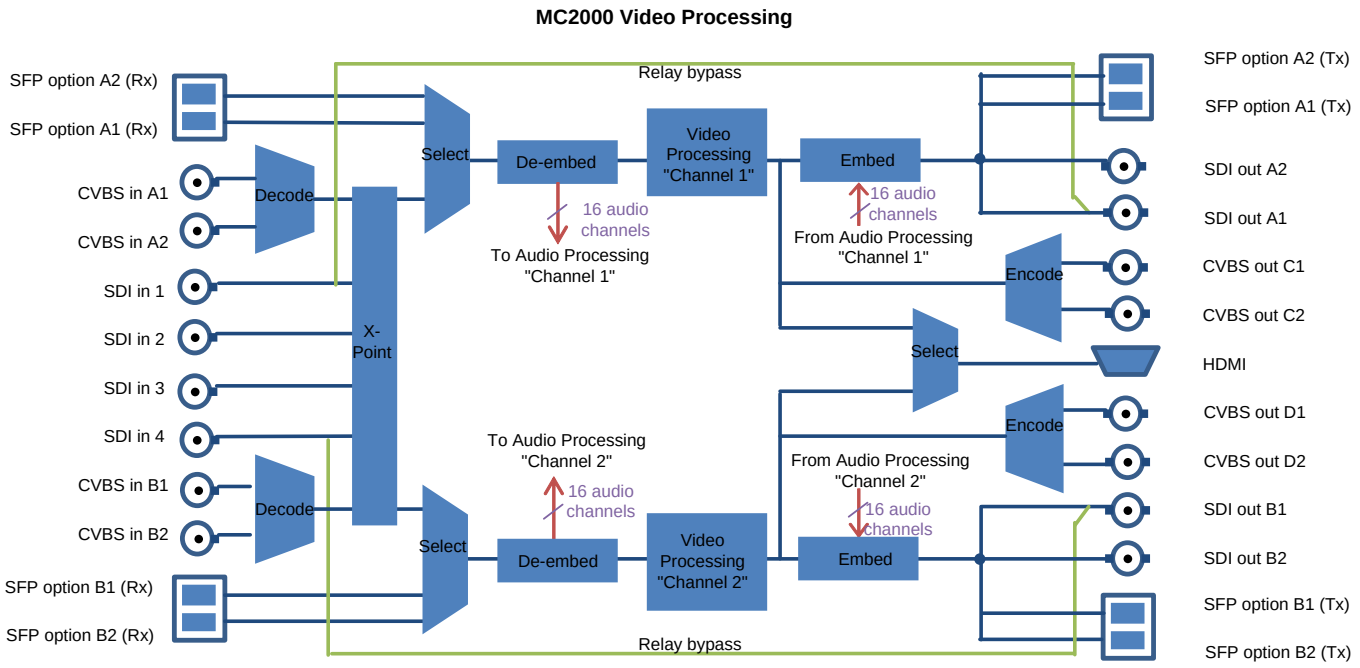

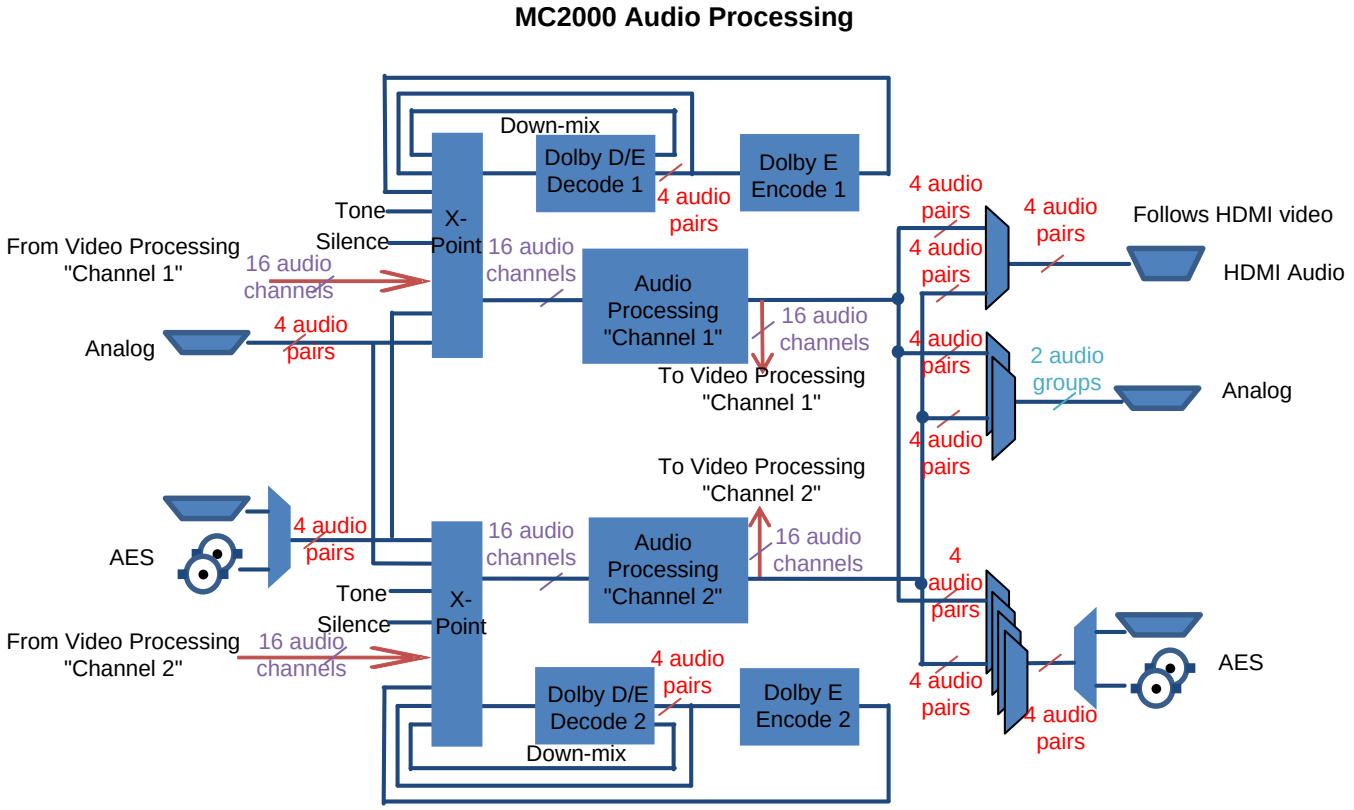

Figure 10: MC2000 block diagrams

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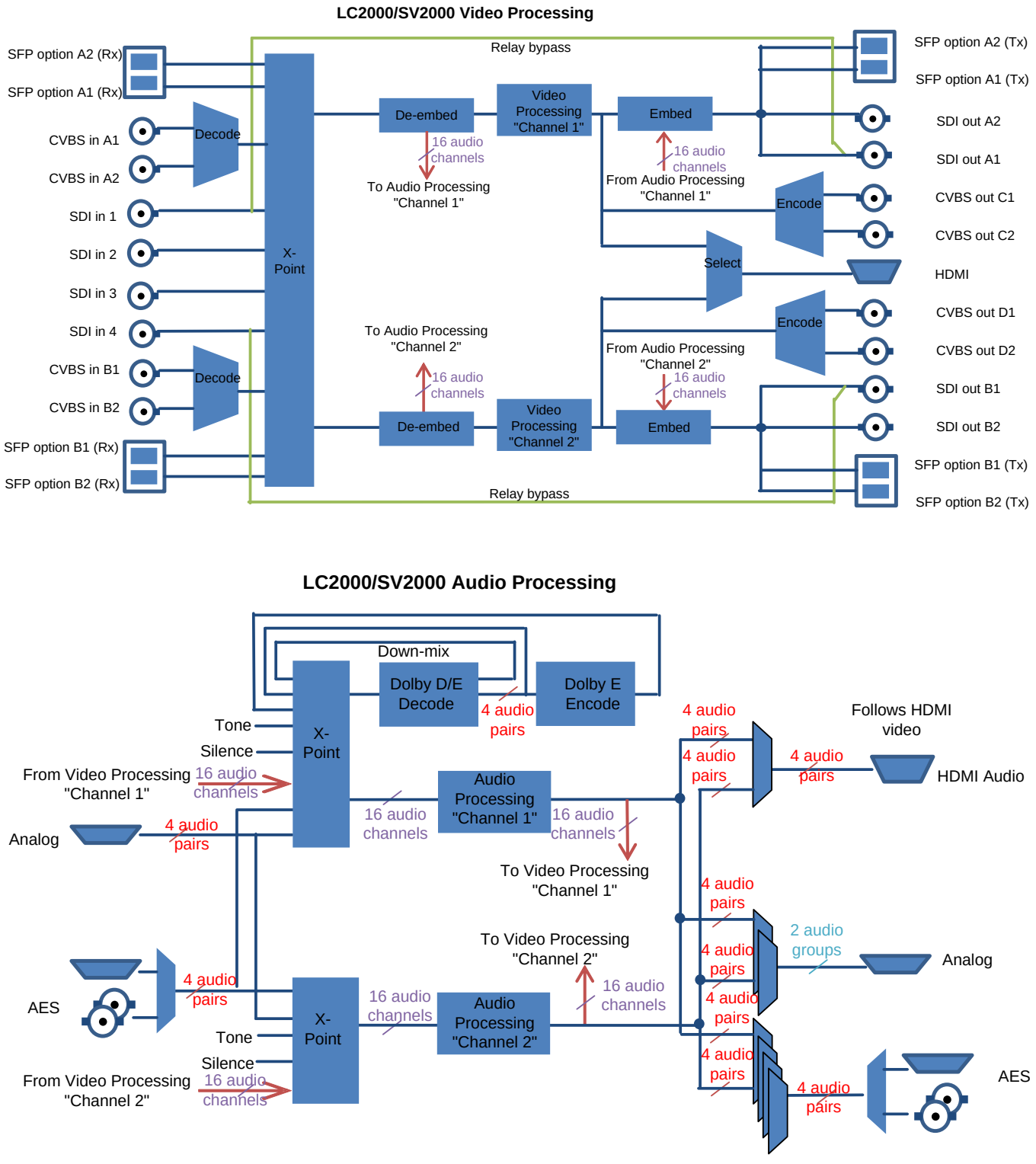

Figure 11: SV2000/LC2000 block diagrams

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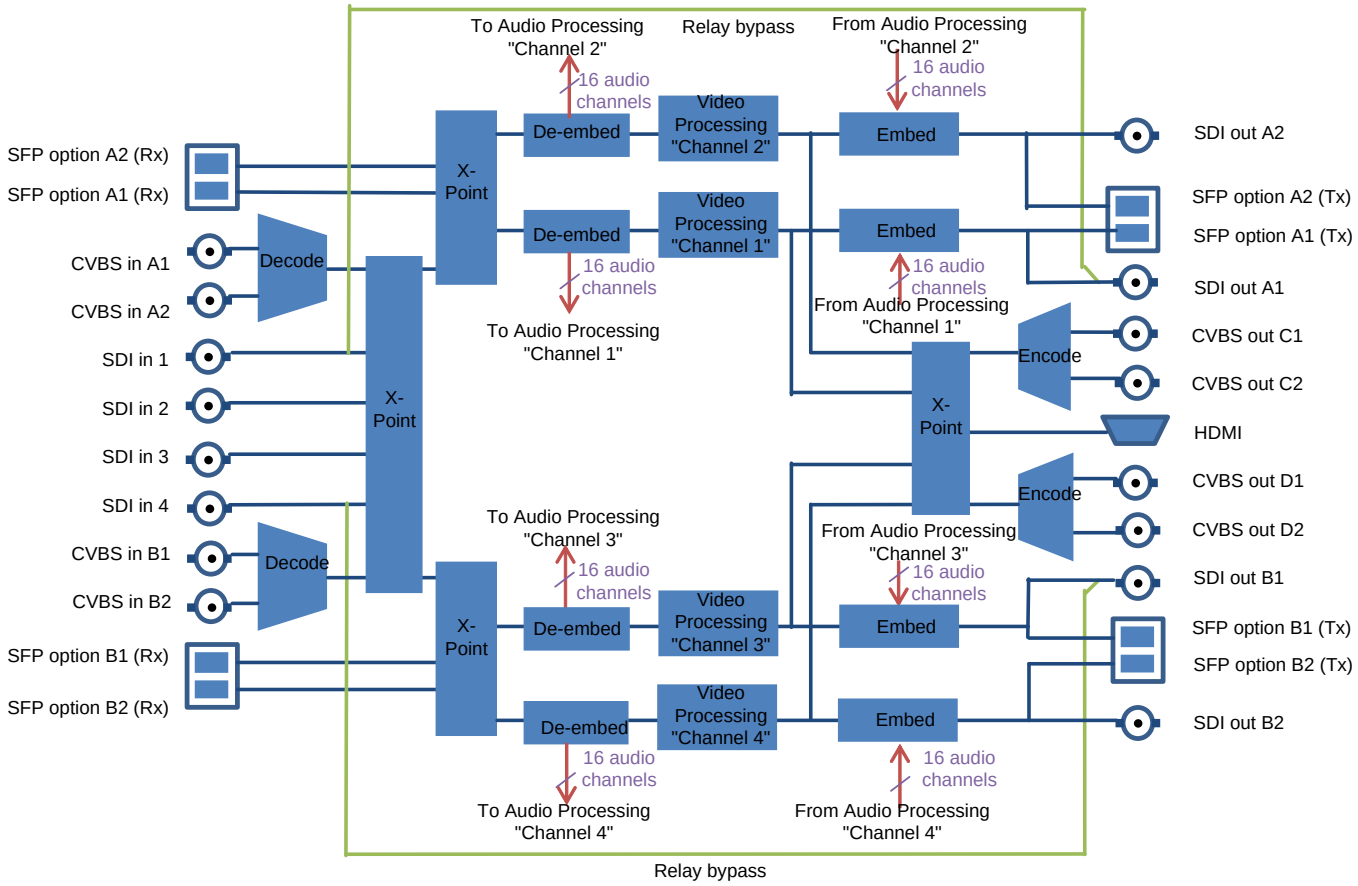
LC4000/SV4000 Video Processing



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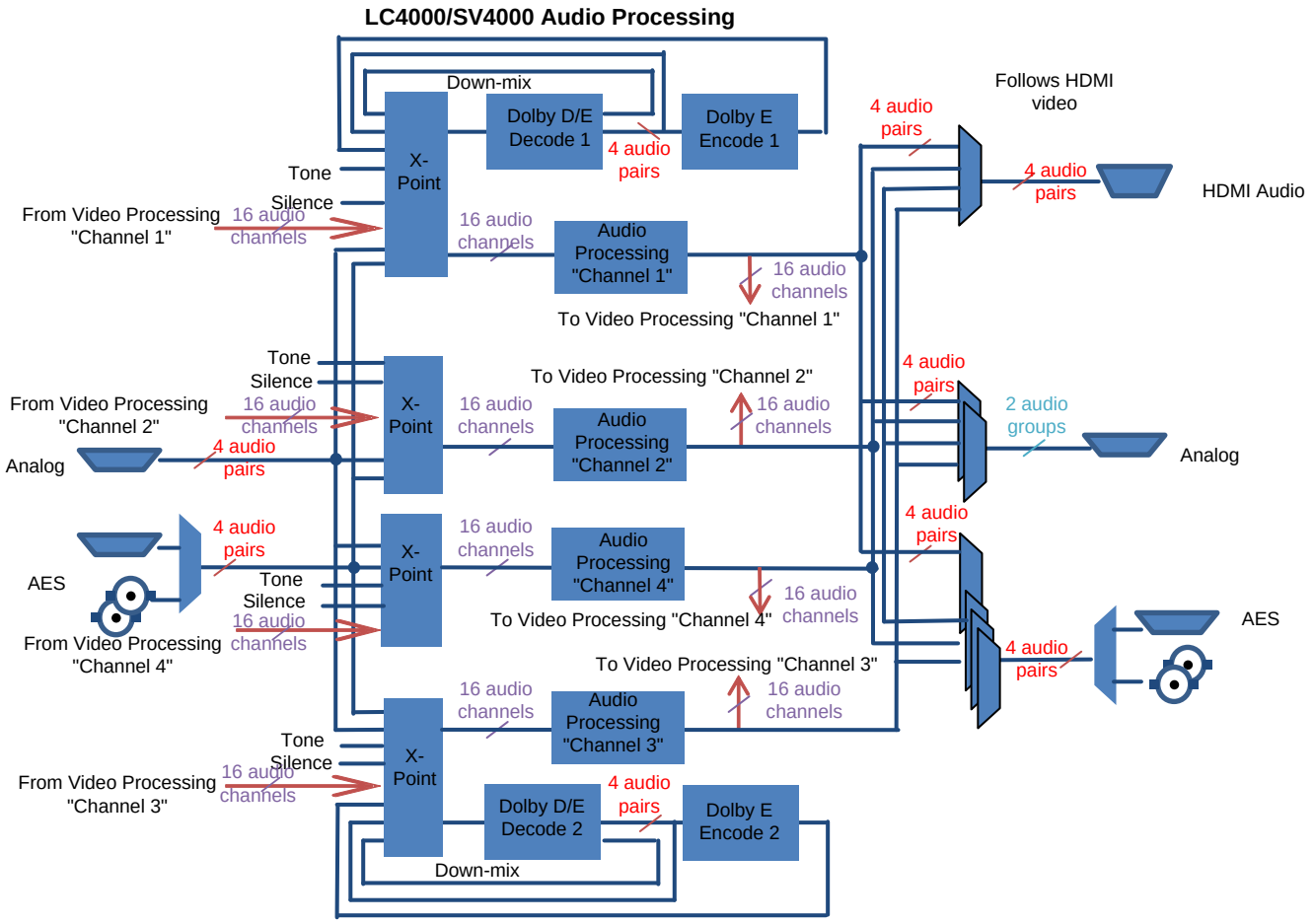

Figure 12: SV4000/LC4000 block diagrams

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